Remarks

This Amendment responds to the Office action mailed October 31, 2007. Applicant and the undersigned again thank the Examiner for the courtesy of agreeing to an interview on February 21, 2008. The substance of the interview is included in these remarks.

Amendments to claims 105 and 107-109, and new claims 110 and 111, are discussed below. No new matter is presented. Applicant reserves the right to present the unamended claims in a further application.

Section 101

The rejection of claims 105 and 107-109 under 35 U.S.C. § 101 is traversed.

Although believed unnecessary, to make more clear that the invention produces a useful, concrete, and tangible result, the claims have been amended. Claim 105 now recites a computer-based system "for use in issuing an interest-bearing instrument." In addition, processor means and storage means are now explicitly recited, and it is made explicit that there are "means for processing data regarding" various aspects claimed. Also added is a means for processing data regarding issuing the instrument.

Claim 105 is now substantially in the same form that as the independent claim that the Federal Circuit ruled patent-eligible in the *State Street Bank* case:

> 1. A data processing system for managing a financial services configuration of a portfolio established as a partnership, each partner being one of a plurality of funds, comprising:
>
> (a) computer processor means for processing data;
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> (b) storage means for storing data on a storage medium;
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> (c) first means for initializing the storage medium;
>
> (d) second means for processing data regarding assets in the portfolio and each of the funds from a previous day and data regarding increases or decreases in each of the funds, assets and for allocating the percentage share that each fund holds in the portfolio;

(e) third means for processing data regarding daily incremental income, expenses, and net realized gain or loss for the portfolio and for allocating such data among each fund;

(f) fourth means for processing data regarding daily net unrealized gain or loss for the portfolio and for allocating such data among each fund; and

(g) fifth means for processing data regarding aggregate year-end income, expenses, and capital gain or loss for the portfolio and each of the funds.

State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, 1371-72 (Fed. Cir. 1998).

Analogous amendments are made to independent claim 108 and dependent claims 107 and 109. It is respectfully submitted that this is sufficient to address all of the Examiner's concerns and obviate the section 101 rejection.

Furthermore, although it is also believed unnecessary, Applicant submits with this Amendment the Declaration of Dr. Arthur Maghakian. Dr. Maghakian, who over the past 10 years has held management positions in various credit risk, market risk, and market trading functions at companies such as Nataxis and Goldman Sachs, provides ample evidence that Applicant's invention produces a useful, concrete, and tangible result. For example:

> [T]he invention enables receipt of cashflows from an instrument that pays more slowly than would otherwise seem likely or otherwise warranted. One of the chief problems vexing Wall Street at this hour, second only to curtailment and reorganization, is the prospect of payment streams that stretch so far into the future, based on a debtor's inability to refinance, that the resulting cashflows are severely attenuated by the basic concepts embedded within industry-standard time-value-of-money calculations. The invention addresses that problem.
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> . . . .
>
> [T]he invention leads to an algebraically denumerable or identifiable result which is quite specific. The results produced are as fully substantial as the work performed under my own awarded patents. My analysis of the applicant's process is that it is credible in light of my own work and my understanding of the construction and issuance of such instruments.

Maghakian Decl. ¶¶ 22 & 46.

The Examiner states:

> The limitation of "any possible combination or permutation of principal size and interest rate" does not produce anything concrete. Similarly an agreement between a debtor and a creditor, providing that the instrument's extension risk and credit risk be completely subject to the creditor's and debtor's control and providing that any options in the subject market are made explicit, priced, and used to correlatively adjust the principal size, interest rate, and payment timing of the underlying obligation do not produce anything concrete.

10/31/07 Office Action at 4-5. But Dr. Maghakian explains that that is incorrect:

> Those skilled in the art will understand . . . that modern finance uses [Monte Carlo Simulation] extensively. Many problems solved under MCS, at some point in their formulation, are problems in continuous time, which implies infinite sets as inputs, but which localize outputs as deterministic numbers. The implication is that price discovery fixes the solution points.
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> . . . .
>
> [U]sing an infinite choice-set as the domain for the applicant's problem does not create an unbounded solution set as the range . . . . As those of ordinary skill recognize, each market participant will use a choice-function to reduce the co-domain to an agreeably sized personal solution; where any two market participants agree upon the unique solution, tangible actions with concrete consequences will follow.
>
> . . . .
>
> My assessment is that the applicant's invention results in a real number, and that repeated calculations using the applicant's invention can reproduce identical results, given identical initial conditions (i.e., parameters). The parameters can be varied over a range of the real numbers chosen by a user and the results will be repeatable and predictable.
>
> . . . .
>
> The fact that the applicant allows infinite flexibility in choice does not mean that decisional closure will not be reached; on the contrary, as those of ordinary skill recognize, such closure is reached via a "choice function" as selected and implemented by the users of the invention.

Maghakian Decl. ¶¶ 38, 41, & 54.

In light of the foregoing, it is respectfully submitted that claims 105 and 107-109 satisfy section 101.

Section 112

The rejection of claims 105 and 107-109 under 35 U.S.C. § 112 ¶ 2 is traversed.

It is respectfully submitted that the amendments to the claims are sufficient to address all of the Examiner's concerns and obviate the section 112 rejection.

Furthermore, although again believed unnecessary, Dr. Maghakian provides additional evidence to rebut the section 112 rejection. For example, the Examiner asks if the options are "on the interest bearing instrument, or are these options on some other underlying instrument?" 10/31/07 Office Action at 2. As Dr. Maghakian explains:

> [T]hese options are not on some other instrument, and are not – initially – on the underlying instrument, but will be part of the underlying instrument. The options embedded in the interest bearing instrument will be priced as contingent claims on the underlying cashflows of that instrument and on the associated interest rates.

Maghakian Decl. ¶ 44.

In light of the foregoing, it is respectfully submitted that claims 105 and 107-109 satisfy section 112.

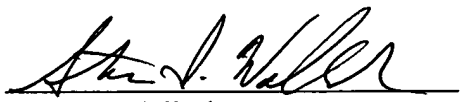
New Claims

New claims 110 and 111 are directed to a medium storing instructions adapted to be executed by a computer processor to perform a method used in issuing an interest-bearing instrument. Support for these claims is found in the specification and previously presented claims. No new matter is presented.

This application is believed to be in condition for allowance and a notice to that effect is respectfully solicited.

If any fee is required, please charge Deposit Account No. 50-0979.

Respectfully submitted,



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